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Title: High-resolution Southern Ocean heat transport modeling to better quantify uncertainties in future Antarctic melt

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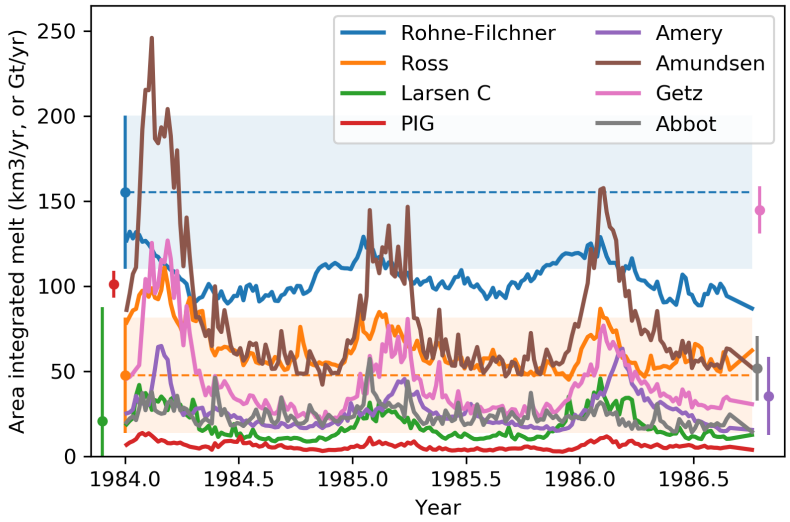
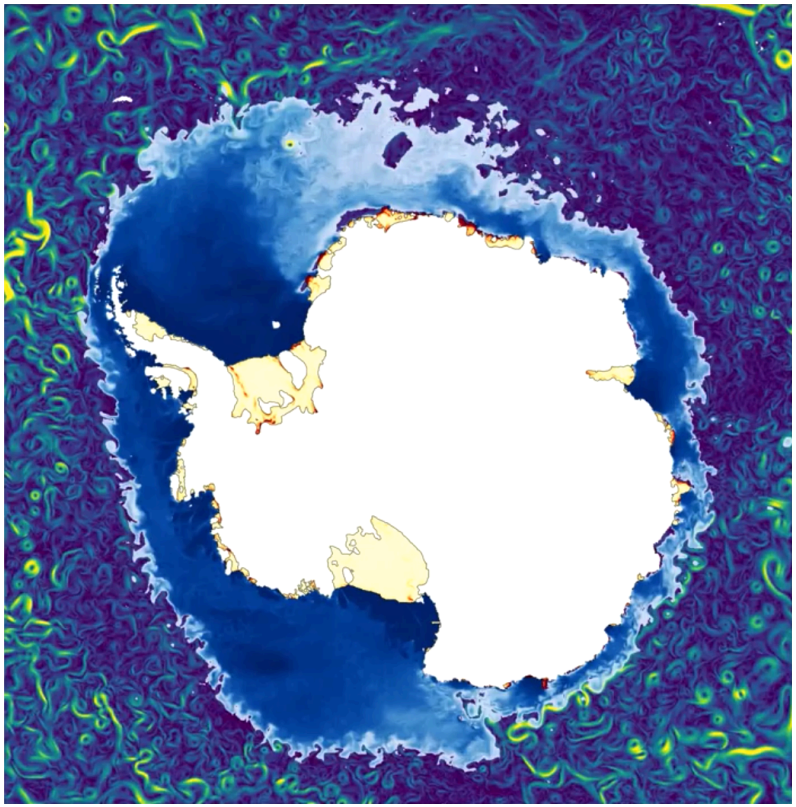
High-resolution Southern Ocean heat transport modeling to better quantify uncertainties in future Antarctic melt

- A high-resolution (5km) regional ocean and sea-ice model with ice-shelf cavities is run with various atmospheric forcing.
- We compare our control run to observed melt rates and water masses and examine the processes responsible for regime shifts and potential runaway melt.





Above: Our high resolution configuration simulates the ocean circulation (green), sea ice (blue) and ice shelf melt (red) around Antarctica.

Left: Simulated melt rates compared to observational estimates from *Rignot et al. 2013*.